

## **ABSTRACT**



A method for forming a gas-enriched fluid is provided. The method includes a step of providing a mixing chamber having a first inlet, a second inlet, and an outlet. A first fluid is delivered into the mixing chamber via the first inlet and flows vortically. A second fluid having a liquid phase supersaturated with a gas is delivered to the mixing chamber via the second inlet to mix with the first fluid and form the gas-enriched fluid.